

IN THE CLAIMS

Please amend the claims as follows:

1. (currently amended) A method for performing input/output (I/O) flooring planning on an integrated circuit design, said method comprising:

collecting user design data related to an I/O circuits of said intergrated circuit design from a plurality of libraries, customer specifications and design databases associated with each package pin;

sorting said collected user design data according to for optimizing simulations of said I/O circuit under operating conditions;

determining whether or not a simulation is required for said I/O circuit before performing I/O floor planning on said I/O circuit;

in response to a determination that a simulation is required on said I/O circuit before performing I/O floor planning on said I/O circuit;

sending said collected design data to a simulation interface;

choosing an I/O behavioral model and a package model by said simulation interface based on said collected design sorted data on said I/O circuit;

dynamically building a simulation deck by said simulation interface using said chosen models along with appropriate operating conditions; and

receiving simulation results by said simulation interface from a circuit simulator after a simulation had been performed by performing simulation

~~through said circuit simulator using said simulation deck containing said~~
chosen I/O behavioral model and said operating conditions; and

performing I/O floor planning for said I/O circuit based on said received
simulation results.

2. (original) The method of Claim 1, wherein said method further includes dynamically analyzing simulation results based on user defined criteria.
3. (original) The method of Claim 1, wherein said collecting further includes collecting design specification from a customer's environment condition.
4. (currently amended) The method of Claim 1, wherein said sorting further includes sorting said collected ~~user~~ design data according to a frequency of operation of said I/O circuits.
5. (currently amended) A system for performing input/output (I/O) ~~flooring~~ planning on an integrated circuit design, said system comprising:

means for collecting user design data related to an I/O circuits of said intergrated
circuit design from a plurality of libraries, customer specifications and design databases
associated with each package pin;

means for sorting said collected user design data ~~aeccording to~~ for optimizing
simulations of said I/O circuit under operating conditions;

means for determining whether or not a simulation is required for said I/O circuit
before performing I/O floor planning on said I/O circuit;

in response to a determination that a simulation is required on said I/O circuit
before performing I/O floor plaming on said I/O circuit.

means for sending said collected design data to a simulation interface;

means for choosing an I/O behavioral model and a package model by said simulation interface based on said collected design sorted data on said I/O circuit;

means for dynamically building a simulation deck by said simulation interface using said chosen models along with appropriate operating conditions; and

means for receiving simulation results by said simulation interface from a circuit simulator after a simulation had been performed by performing simulation through said circuit simulator using said simulation deck containing said chosen I/O behavioral model and said operating conditions; and

means for performing I/O floor planning for said I/O circuit based on said received simulation results.

6. (original) The system of Claim 5, wherein said system further includes means for dynamically analyzing simulation results based on user defined criteria.
7. (original) The system of Claim 5, wherein said means for collecting further includes means for collecting design specification from a customer's environment condition.
8. (currently amended) The system of Claim 5, wherein said means for sorting further includes means for sorting said collected ~~user~~ design data according to a frequency of operation of said I/O circuits.

9. (currently amended) A computer usable medium having a computer program product residing on a computer usable medium for performing input/output (I/O) floor planning on an integrated circuit design, said computer usable medium program product comprising:

program code means for collecting user design data related to an I/O circuits of said integrated circuit design from a plurality of libraries, customer specifications and design databases associated with each package pin;

program code means for sorting said collected user design data according to for optimizing simulations of said I/O circuit under operating conditions;

program code means for determining whether or not a simulation is required for said I/O circuit before performing I/O floor planning on said I/O circuit;

in response to a determination that a simulation is required on said I/O circuit before performing I/O floor planning on said I/O circuit;

program code means for sending said collected design data to a simulation interface;

program code means for choosing an I/O behavioral model and a package model by said simulation interface based on said collected design sorted data on said I/O circuit;

program code means for dynamically building a simulation deck by said simulation interface using said chosen models along with appropriate operating conditions; and

program code means for receiving simulation results by said simulation interface from a circuit simulator after a simulation had been performed by

~~performing simulation through said~~ circuit simulator using said simulation deck containing said chosen I/O behavioral model and said operating conditions; and

program code means for performing I/O floor planning for said I/O circuit based on said received simulation results.

10. (currently amended) The computer usable medium ~~program-product~~ of Claim 9, wherein said computer usable medium ~~program-product~~ further includes program code means for dynamically analyzing simulation results based on user defined criteria.

11. (currently amended) The computer usable medium ~~program-product~~ of Claim 9, wherein said program code means for collecting further includes program code means for collecting design specification from a customer's environment condition.

12. (currently amended) The computer usable medium ~~program-product~~ of Claim 9, wherein said program code means for sorting further includes means for sorting said collected user design data according to a frequency of operation of said I/O circuits.